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EXAMINER	
MOORE, IAN N	

ART UNIT	PAPER NUMBER
2661	

DATE MAILED: 11/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/751,014	CHASKAR, HEMANT M.	
	Examiner	Art Unit	
	Ian N Moore	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *amendment filed on 8-16-2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15 and 18-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15 and 18-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. An objection to the title is withdrawn since it is being amended accordingly.

2. Claims 16-17 is cancelled, claim 18 is amended, and new claim 21 is added.

3. Claim 21 is rejected by the new ground(s) of rejection necessitated by the amendment.

4. Claims 1-15 and 18-20 are rejected by the same ground of rejections.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1,3-15, and 18-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Barany (U.S. 2003/0189900A1).

Regarding Claims 1 and 5, Barany'900 discloses a General Packet Radio Service (GPRS) network (see FIG. 4, GPRS network) comprising a plurality of GPRS Support Nodes (GSNs) (see FIG. 4, LR1/SGSN 302, BR1/SGSN 20, ER1/GGSN 304, BR2/GGSN 22, and ER2/GGSN 306), including at least one Serving GPRS Support Node (SGSN) (see FIG. 4, LR1/SGSN 302 or BR1/SGSN 20) in communication with at least one Gateway GPRS Support Node (GGSN) (see FIG. 4, ER2/GGSN or BR2/GGSN 22) via an Internet Protocol (IP)-based network (see FIG. 4, network 320,322, or 324 is the Internet based network; see

page 1, paragraph 5) comprising a plurality of intermediate nodes (see FIG. 4, intermediates routers 350, 352 and 27; see page 5-6, paragraph 46 and 60) method for communicating data across the IP-based network according to a plurality of traffic classes (see FIG. 5, plurality of traffic classes/queues), the method comprising steps of:

defining a plurality of delay-differentiated paths (see FIG. 4, identifying/defining plurality of DS routes/paths according to DiffServ/ DS/flow-label/traffic-class labels between the routers; see page 5, paragraph 46) within the IP-based network between each of the at least one SGSN (see FIG. 4, LR1/SGSN 302 or BR1/SGSN 20) and each of the at least one GGSN (see FIG. 4, ER1/GGSN 304, BR2/GGSN 22, or ER2/GGSN 306; see page 6, paragraph 61), wherein each of the plurality of traffic classes (see FIG. 5, each of plurality of traffic classes/queues) has at least one delay-differentiated path of the plurality of delay-differentiated paths corresponding thereto (see FIG. 5 and see page 6, paragraph 63-64; note that DS value in each packet maps/corresponds to each different class of traffic, and different type of traffics are queued and routed toward plurality of DS paths);

determining, by an ingress GSN of the plurality of GSNs (see FIG. 4, input/ingress of router 20 of the plurality of routers 302,304,20,22, and 306), a traffic class of the plurality of traffic classes corresponding to the data (see page 5, paragraph 47 and page 6, paragraph 61; note that each router has a capability to classify the received traffic);

assigning, by the ingress GSN, a label to at least a portion of the data according to the traffic class (see page 4-5, paragraph 43, 47; each PHB group label is mapped/assigned to each packet (i.e. a packet carries portion of the data) according to the QoS of traffic type/class) to provide labeled data (see page 6, paragraphs 61-62; note that each traffic class

is metered and marked/label by the appropriate PHB to form/provide PHB label/level packet); and

routing, by the ingress GSN to an egress GSN of the plurality of GSNs (see FIG. 4, routing input/ingress traffic to output/egress router 22 of plurality of routers 302,304,20,22, and 306), the labeled data through a first delay-differentiated path of the plurality of delay-differentiated paths based on correspondence of the label to the first delay-differentiated path (see page 6-7, paragraph 63-65,67; note that each PHD group label packet is routed through the first DS path of plurality DS paths according to the PHD group label/parameter (i.e. streaming, conversation, interactive, and etc.)).

Regarding Claims 10 and 11, Barany discloses a General Packet Radio Service (GPRS) network (see FIG. 4, GPRS network) comprising a plurality of GPRS Support Nodes (GSNs) (see FIG. 4, LR1/SGSN 302, BR1/SGSN 20, BR2/GGSN 22, and ER2/GGSN 306), including at least one Serving GPRS Support Node (SGSN) (see FIG. 4, LR1/SGSN 302 or BR1/SGSN 20) in communication with at least one Gateway GPRS Support Node (GGSN) (see FIG. 4, ER2/GGSN or BR2/GGSN 22) via an Internet Protocol (IP)-based network (see FIG. 4, network 320,322, or 324 is the Internet based network; see page 1, paragraph 5) comprising a plurality of intermediate nodes (see FIG. 4, intermediates routers 350, 352 and 27; see page 5-6, paragraph 46 and 60), a method for communicating data across the IP-based network according to a plurality of traffic classes (see FIG. 5, plurality of traffic classes/queues), the method comprising steps of:

determining, by an ingress GSN of the plurality of GSNs (see FIG. 4, input/ingress of router 20 of the plurality of routers 302,20,22, and 306), a traffic class of the plurality of

traffic classes corresponding to the data (see page 5, paragraph 47 and page 6, paragraph 61; note that each router has a capability to classify the received traffic);

assigning, by the ingress GSN, a per-hop behavior (PHB) group of a plurality of PHB groups (see page 4-5, paragraph 43, 47; a PHB group label from various/plurality of PHB groups is mapped/assigned to several QoS of traffic type/class) to the data based on the traffic class (see page 6, paragraphs 61-62; note that each traffic class is metered and assigned by the appropriate PHB according to the QoS),

transmitting, by the ingress GSN, a portion of the data to one of the plurality of intermediate nodes (see FIG. 4, each packet (i.e. a packet carries portion of the data) is send/transmitted by the BR1/SGSN 20 to one of the intermediate routers 352 within the network 312; see page 6, paragraph 60-61); and

handling, by the one of the plurality of intermediate nodes, the portion of the data based on the PHB group (see page 6-7, paragraph 63-65,67; note that since the BR1 is labeled/mapped the PHD group label/parameter (i.e. streaming, conversation, interactive, and etc.), it is clear that each intermediate router must handle each packet accordingly).

Regarding Claims 3 and 14, Barany discloses wherein the ingress GSN comprises one of the at least one SGSN (see FIG. 4, BR1/SGSN 20 or LR1/SGSN 302) and the egress GSN comprises one of the at least one GGSN (see FIG. 4, BR2/GGSN 22 or ER2/GGSN 306).

Regarding Claims 4 and 15, Barany discloses wherein the ingress GSN comprises one of the at least one GGSN (see FIG. 4, BR2/GGSN 22 or ER2/GGSN 306) and the egress

GSN comprises one of the at least one SGSN (see FIG. 4, BR1/SGSN 20 or LR1/SGSN 302).

Regarding Claims 6, Barany discloses wherein transmitting, by the ingress GSN, the labeled data to one of the plurality of intermediate nodes (see FIG. 4, each PHB labeled/mapped packet (i.e. a packet carries portion of the data) is send/transmitted by the BR1/SGSN 20 to one of the intermediate routers 352 within the network 312; see page 6, paragraph 60-61);

handling, by the one of the plurality of intermediate nodes, the labeled data based on the traffic class (see page 6-7, paragraph 63-65,67; note that since the BR1 is labeled/mapped the PHD group label/parameter (i.e. streaming, conversation, interactive, and etc.), it is clear that each intermediate router must handle each labeled/mapped packet accordingly).

Regarding Claim 7, Barany discloses wherein each of the plurality of traffic classes has a unique correspondence to one of a plurality of per-hop behavior (PHB) groups, further comprising a step of:

assigning, by the ingress GSN, a PHB group of the plurality of PHB groups (see page 4-5, paragraph 43, 47; a PHB group label from various/plurality of PHB groups is mapped/assigned to the QoS of the traffic type/class) to the labeled data based on the traffic class (see page 6, paragraphs 61-62; note that each DS labeled traffic is metered and assigned by the appropriate PHB according to the QoS),

wherein the step of handling further comprises the intermediated nodes handling the labeled data according to the per-hop behavior group assigned to the labeled data (see page 6-7, paragraph 63-65,67; note that since the BR1 is labeled/mapped the PHB group

label/parameter (i.e. streaming, conversation, interactive, and etc.), it is clear that each intermediate router must handle the labeled/mapped packet accordingly.)

Regarding Claims 8, 12 and 19, Barany discloses wherein the plurality of traffic classes comprises conversational (see FIG. 5, Conversational queues 416,418-420), streaming (see FIG. 5, Streaming queues 412,414), interactive (see FIG. 5, Interactive queues 404-408) and background traffic classes (see FIG. 5, Background queue 402), and

wherein the conversational class corresponds to an Expedited Forwarding PHB group (see page 4, paragraph 43: note that conversational class is mapped to the EF (expedited forwarding) PHB group),

the streaming class corresponds to a First Assured Forwarding (AF1) PHB group (see FIG. 5, Streaming AF11, where the range is between AF11-AF43, is the first assure forwarding group; page 4, paragraph 42-43),

the interactive class corresponds to a Second Assured Forwarding (AF2) PHB group (see FIG. 5, Interactive AF21, where the range is between AF11-AF43 is the second assure forwarding group, is the second assure forwarding group; page 4, paragraph 42-43), and

the background class corresponds to a Third Assured Forwarding (AF3) PHB group (see FIG. 5, background DE, default/best effort forwarding PHB, is the third assure forwarding group; page 4, paragraph 41-43).

Regarding claims 9, 13 and 20, Barany discloses assigning the PHB group to the labeled data based on any of a group consisting of: a source IP address, a destination IP address, a source port number, a destination port number, an IP protocol identification, and a packet size (see FIG. 5, Controller 430; see page 4, paragraph 40; note that controller

assigns/maps each DS labeled packet to PHB group according to any of a group consisting of a flow label or traffic class label of the IP v4 or v6 header.)

Regarding Claim 18, Barany'900 discloses an improved General Packet Radio Service (GPRS) network (see FIG. 4, GPRS network) comprising a plurality of GPRS Support Nodes (GSNs) (see FIG. 4, LR1/SGSN 302, BR1/SGSN 20, ER1/GGSN 304, BR2/GGSN 22, and ER2/GGSN 306) in communication with each other via an Internet Protocol (IP)-based network (see FIG. 4, network 320,322, or 324 is the Internet based network; see page 1, paragraph 5) comprising a plurality of intermediate nodes (see FIG. 4, intermediates routers 350, 352 and 27; see page 5-6, paragraph 46 and 60), wherein the improved GPRS network is capable of supporting a plurality of traffic classes (see FIG. 5, plurality of traffic classes/queues), the improvement comprising:

at least one Serving GPRS Support Node (SGSN) (see FIG. 4, LR1/SGSN 302 or BR1/SGSN 20) and at least one Gateway GPRS Support Node (GGSN) (see FIG. 4, ER2/GGSN or BR2/GGSN 22) having a plurality of delay-differentiated paths (see FIG. 4, identifying/defining plurality of DS routes/paths according to DiffServ/ DS/flow-label/traffic-class labels between the routers; see page 5, paragraph 46) within the IP-based network (see FIG. 4, network 320,322, or 324 is the Internet based network; see page 1, paragraph 5) between each of the at least one SGSN (see FIG. 4, LR1/SGSN 302 or BR1/SGSN 20) and each of the at least one GGSN (see FIG. 4, ER1/GGSN 304, BR2/GGSN 22, or ER2/GGSN 306; see page 6, paragraph 61), wherein each of the plurality of traffic classes (see FIG. 5, each of plurality of traffic classes/queues) has at least one delay-differentiated path of the plurality of delay-differentiated paths corresponding thereto (see

FIG. 5 and see page 6, paragraph 63-64; note that DS value in each packet maps/corresponds to each different class of traffic, and different type of traffics are queued and routed toward plurality of DS paths);

wherein each of the at least on SGSN and each of the at least one GGSN further function to assign a per-hop behavior group of a plurality of PHB groups (see page 4-5, paragraph 43, 47; a PHB group label from various/plurality of PHB groups is mapped/assigned to the QoS of the traffic type/class) to data belonging to a traffic class of the plurality of traffic classes (see page 6, paragraphs 61-62; note that each DS labeled traffic is metered and assigned by the appropriate PHB according to the QoS), wherein the intermediate nodes handle the data according to the PHB group (see page 6-7, paragraph 63-65,67; note that since the BR1 is labeled/mapped the PHB group label/parameter (i.e. streaming, conversation, interactive, and etc.), it is clear that each intermediate router must handle the labeled/mapped packet accordingly.)

Regarding Claim 21, Barany'900 discloses a General Packet Radio Service (GPRS) network (see FIG. 4, GPRS network) comprising a plurality of GPRS Support Nodes (GSNs) (see FIG. 4, LR1/SGSN 302, BR1/SGSN 20, ER1/GGSN 304, BR2/GGSN 22, and ER2/GGSN 306), a method for communicating data across an IP-based network (see FIG. 4, IP network 320,322, or 324; see page 1, paragraph 5) according to a plurality of traffic classes (see FIG. 5, plurality of traffic classes/queues), the method comprising the steps of:

determining, by an ingress GSN of the plurality of GSNs (see FIG. 4, input/ingress of router 20), a traffic class corresponding the data (see FIG. 5, traffic classes queues 402,404,406,408 and received data; see page 5, paragraph 47; page 6, paragraph 63-64); and

assigning (see FIG. 5, Controller 430 and packet scheduler 410), by the ingress GSN, a label (see FIG. 5, PHB groups label; AF11, EF, AF21 or DE), to at least a portion of the data according to the traffic class to provide labeled data (see FIG. 5, DSCP; PHB label/level packet; see page 4-5, paragraph 43, 47; see page 6, paragraphs 61-62).

routing the labeled data (see FIG. 4, routing between routers 22, 302,304,20,22, and 306), through one of a plurality of delay-differential paths (see FIG. 4, DS paths) based on a correspondence of the label to the one delay-differential path (see page 6-7, paragraph 63-65,67; routing according to the PHD group label).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barany in view of Gibson (U.S. 6,680,943).

Regarding claims 2, Barany discloses defining the plurality of delay-differentiated paths within the at least one SGSN and the at least one GGSN as described above in claim 1 and 16.

Barany does not explicitly disclose Multi-Protocol Label Switching (MPLS) implemented within the at least one SGSN/node and the at least one GGSN/node.

However, the above-mentioned claimed limitations are taught by Gibson'943. In particular, Gibson'943 teaches defining the plurality of delay-differentiated paths based on Multi-Protocol Label Switching (MPLS) (see FIG. 1, MPLS networks 15) implemented within the at least one SGSN/node (see FIG. 1, Abstract node AN 12) and the at least one GGSN/node (see FIG. 1, Abstract node AN 13); see col. 9, lines 1-25.

Note that Barany's SGSNs and GGSNs are the border routers/nodes of the packet switching network. Gibson'943 teaches the abstract routers/nodes at the edge/border of the MPLS network. In view of this, having the system of Barany and then given the teaching of Gibson'943, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Barany, by providing MPLS mechanism in the border/edges nodes of the packet switching network, as taught by Gibson'943. The motivation to combine is to obtain the advantages/benefits taught by Gibson'943 since Gibson'943 states at col. 9, line 20-25 that such modification would provide a new/updated/different set of diverse routes over the network, thereby spreading the load of the traffic over the network.

Response to Arguments

9. Applicant's arguments filed 8-16-2004 regarding 1-20 have been fully considered but they are not persuasive.

Regarding claim 1, the applicant argued that, "...Barany does not disclose, teach or suggest "assigning, by the ingress GSN, a label to at least a portion of the data according to the traffic class to provide labeled data"..." in page 10, paragraph 3.

In response to applicant's argument, the examiner respectfully disagrees that Barany does not disclose, teach or suggest, "assigning, by the ingress GSN, a label to at least a portion of the data according to the traffic class to provide labeled data. Barany teaches assigning, by the ingress GSN (see FIG. 4, input/ingress of router 20 of the plurality of routers 302,304,20,22, and 306), a label to at least a portion of the data according to the traffic class (see page 4-5, paragraph 43, 46-47; note that each PHB group label is mapped/assigned to each packet (i.e. a packet carries portion of the data stream) according to the QoS of traffic type/class; see page 6, paragraph 61; a function of a router is to classified each packet) to provide labeled data (see page 6, paragraphs 61-62; each traffic class is metered/marked/labeled by the appropriate PHB to form/provide PHB label/level packet). As recited above, each router assigns/maps/meters each PHB group label to each packet. Thus, each packet or at least portion of the data is assigned/mapped with a PHB group label, which defines the QoS traffic type/class, according to the type of traffic/data in each packet or portion of the data. Also, as shown in FIG. 5, it is clearly shown that the Controller 430 and scheduler 410 of the router (i.e. ingress GSN) clearly assigns a PHB traffic class label to each packet or portion of the data; see FIG. 5.

Regarding claim 7, the applicant argued that, "...Barany fails to teach or discloses wherein each of the plurality of traffic classes has a unique correspondence to one of a plurality of per-hop behavior (PHB) groups..." in page 10, paragraph 5, "...a plurality of traffic class having a unique correspondence to one of a plurality of PHG group..." in page 11, paragraph 1.

In response to applicant's argument, the examiner respectfully disagrees Barany fails to teach or discloses wherein each of the plurality of traffic classes has a unique correspondence to one of a plurality of per-hop behavior (PHB) groups. Barany discloses wherein each of the plurality of traffic classes (see FIG. 5, Conversational traffic queues 416,418-420, Streaming traffic queues 412,414, Interactive traffic queues 404-408, see FIG. 5, Background traffic queue 402) has a unique correspondence to one of a plurality of per-hop behavior (PHB) groups (see page 4, paragraph 41-44; EF, AF11 group, AF21, background DE PHB groups; each traffic class has a unique/sole association to each PHG group. The conversational class has a unique/sole association with the EF (expedited forwarding) PHB group, Streaming traffic has a unique/sole association with AF11 PHB group, interactive traffic has unique/sole association with AF21 PHB group, and background traffic has unique/sole association with AF21 PHB group.

Regarding claims 7 and 10, the applicant argued that, "...Barany does not teach or suggest assigning, by the ingress GSN, a PHB group of the plurality of PHB group...based on the traffic class..." in page 11, paragraph 1 and page 12, paragraph 1.

In response to applicant's argument, the examiner respectfully disagrees Barany does not teach or suggest assigning, by the ingress GSN, a PHB group of the plurality of PHB group...based on the traffic class. Barany teaches assigning, by the ingress GSN (see FIG. 4, input/ingress of router 20 of the plurality of routers 302,304,20,22, and 306), a PHB group of the plurality of PHB groups (see page 4-5, paragraph 43, 47; a PHB group label from various/plurality of PHB groups is mapped/assigned to the QoS of the traffic type/class) to the labeled data based on the traffic class (see page 6, paragraphs 61-62; note that each DS

labeled traffic is metered and assigned by the appropriate PHB according to the QoS). Note that a function of a router is to classify each packet, and each traffic class is metered/marked/labeled by the appropriate PHB to form/provide PHB label/level packet.

Regarding claim 8, the applicant argued that, "...Barany does not teach or suggest an Expedited Forwarding PHB group, a First Assured Forwarding (AF1) PHB group, Second Assured Forwarding (AF2) PHB group, and Third Assured Forwarding (AF3) PHB group ..." in page 11, paragraph 3.

In response to applicant's argument, the examiner respectfully disagrees Barany does not teach or suggest an Expedited Forwarding PHB group, a First Assured Forwarding (AF1) PHB group, Second Assured Forwarding (AF2) PHB group, and Third Assured Forwarding (AF3) PHB group. Barany discloses an Expedited Forwarding PHB group (see page 4, paragraph 43: note that conversational class is mapped to the EF (expedited forwarding) PHB group), the streaming class corresponds to a First Assured Forwarding (AF1) PHB group (see FIG. 5, Streaming AF11, where the range is between AF11-AF43, is the first assure forwarding group; page 4, paragraph 42-43), the interactive class corresponds to a Second Assured Forwarding (AF2) PHB group (see FIG. 5, Interactive AF21, where the range is between AF11-AF43 is the second assure forwarding group, is the second assure forwarding group; page 4, paragraph 42-43), and the background class corresponds to a Third Assured Forwarding (AF3) PHB group (see FIG. 5, background DE, default/best effort forwarding PHB, is the third assure forwarding group; page 4, paragraph 41-43).

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N Moore whose telephone number is 571-272-3085. The examiner can normally be reached on M-F: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ken Vanderpuye can be reached on 571-272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

INM
10/29/04

BRIAN NGUYEN
PRIMARY EXAMINER